PATENT SKETCH FORM

Attorney _RDB_

4

2

8

6

PRIOR ART

FIGURE 1

6

8

2

PRIOR ART
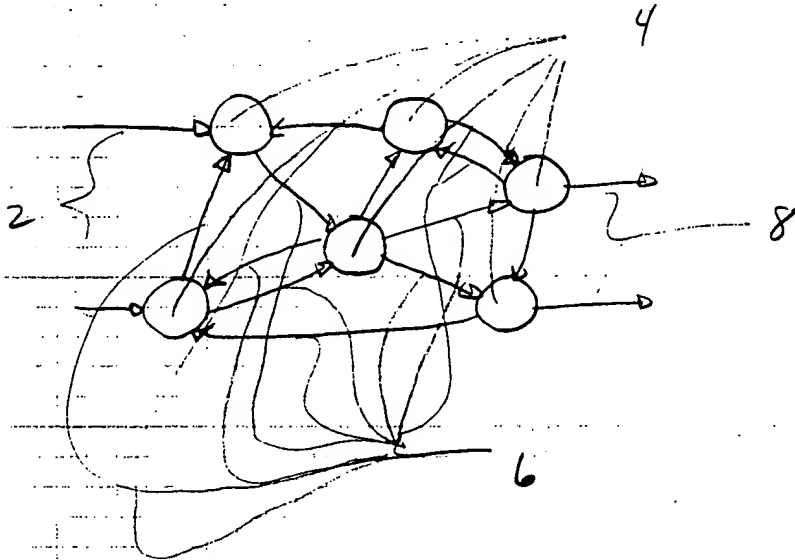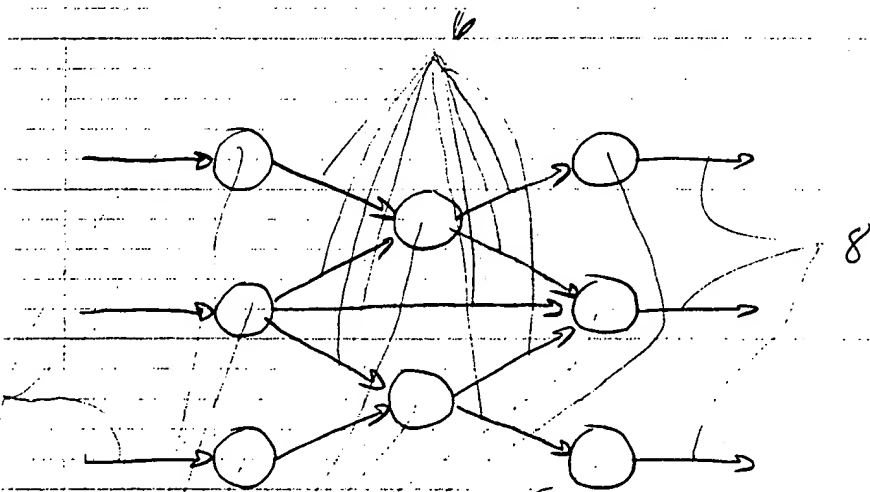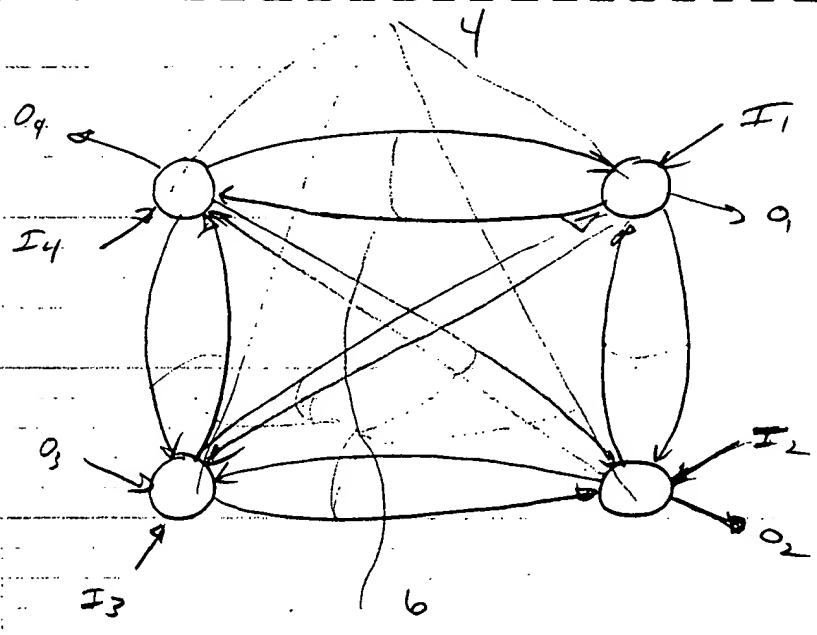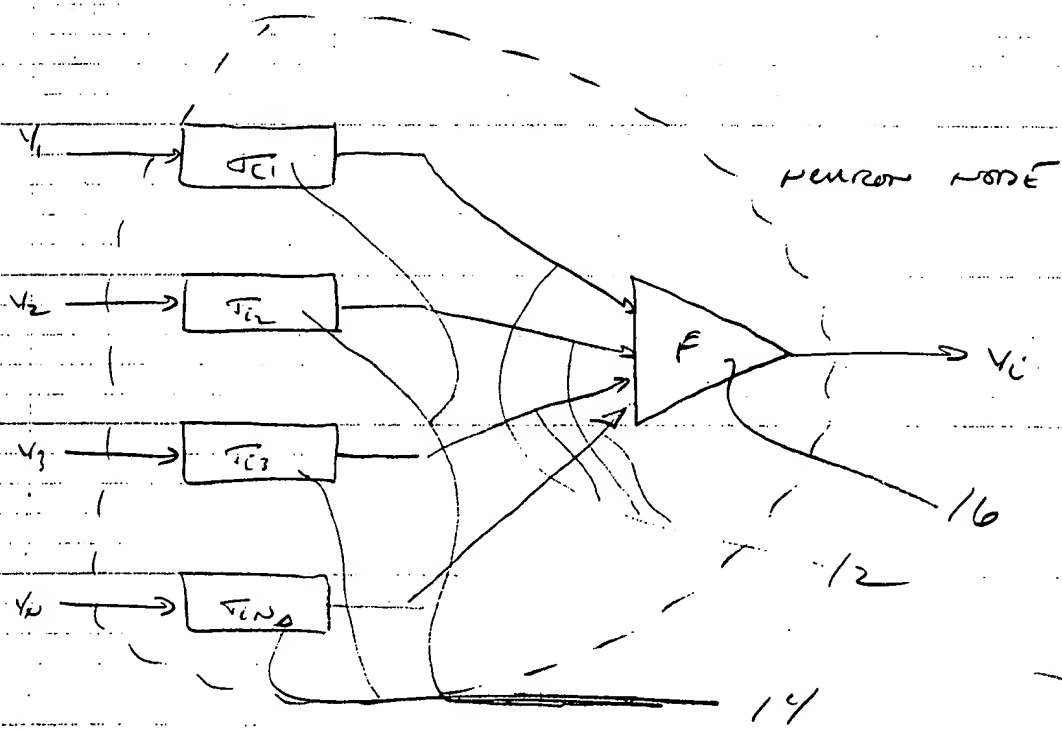
FIGURE 2

4

PATENT SKETCH FORM

Attorney _MDB_

PRIOR ART

FIGURE 3

PRIOR ART

FIGURE 4

PATENT SKETCH FORM

Attorney _____RLDB_____

PRIOR ART

FIGURE 5

PRIOR ART

FIGURE 6

PATENT SKETCH FORM

Attorney ___RDB___

PRIOR ART
FIGURE 7

PRIOR ART
FIGURE 8

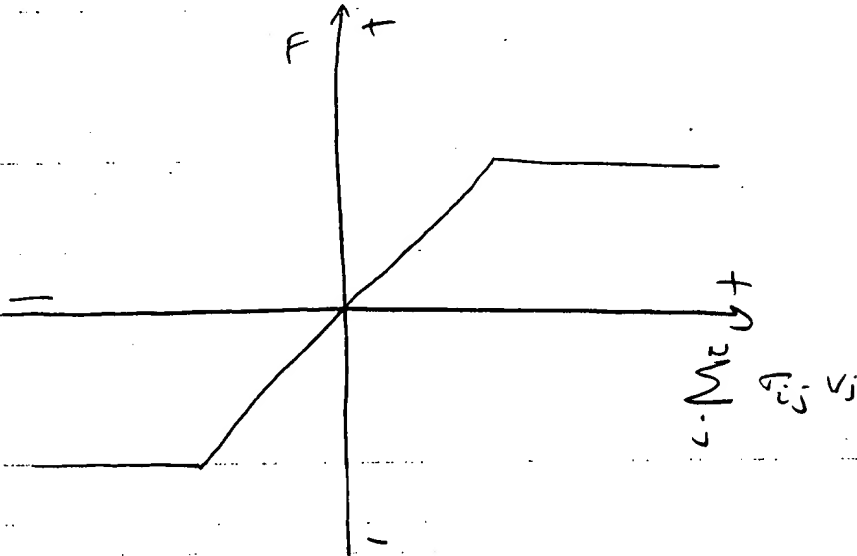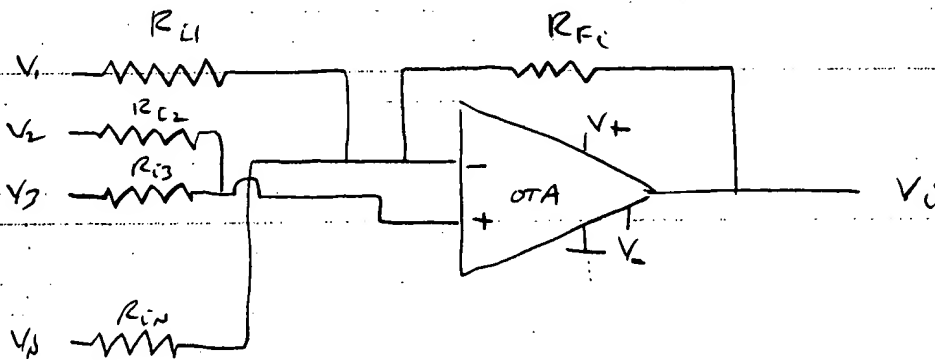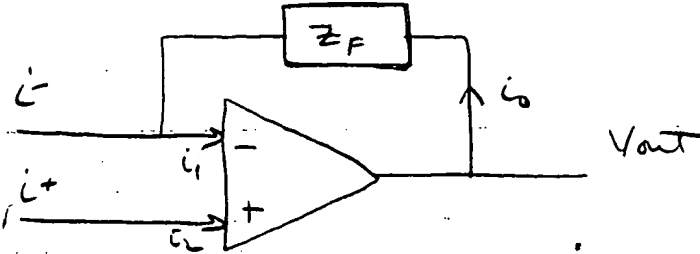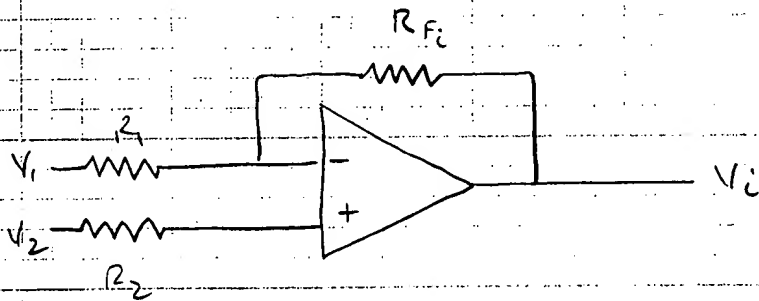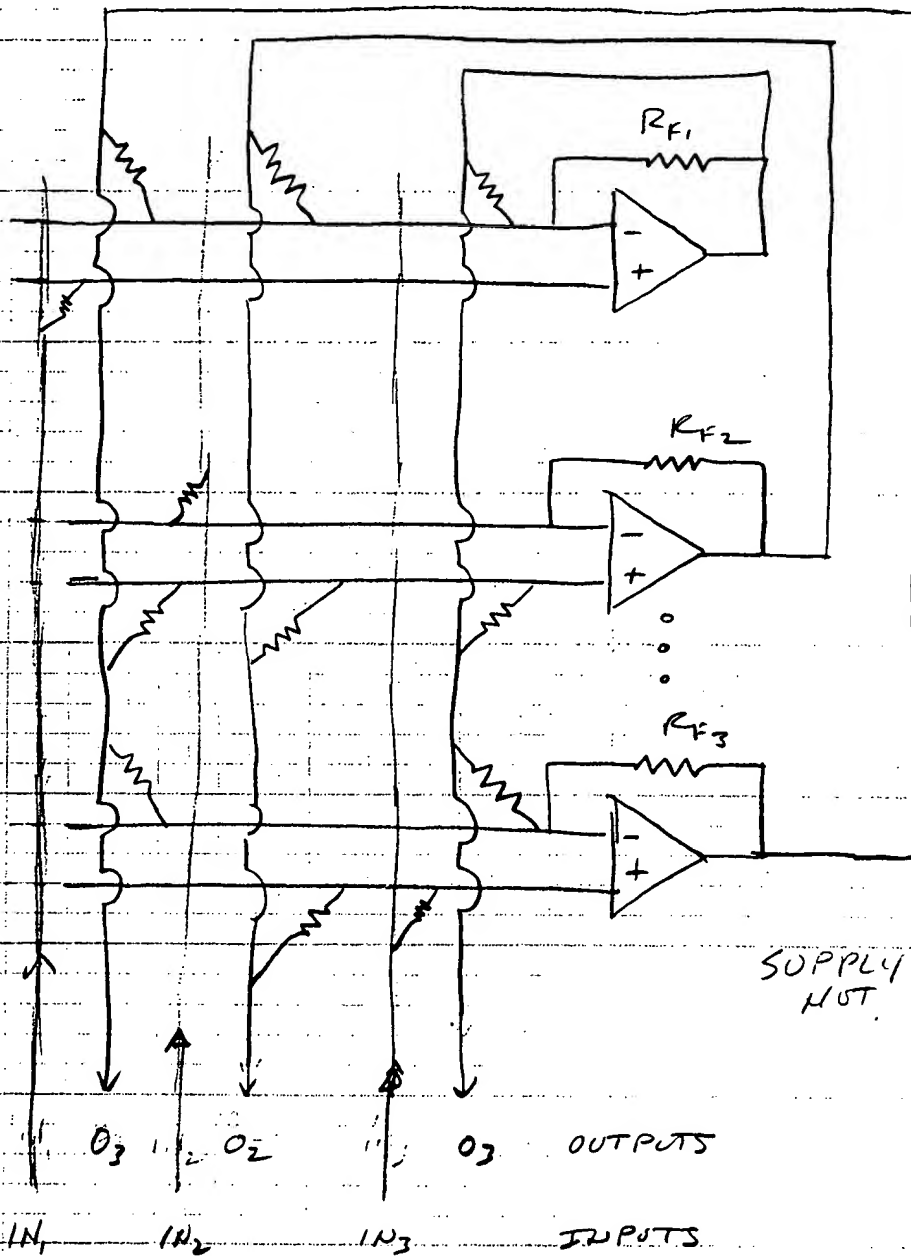# PATENT SKETCH FORM

Attorney __RDB__

R_{F_1}

R_{F_2}

R_{F_3}

SUPPLY VOLTAGES
NOT SHOWN

O_1 O_2 O_3 OUTPUTS

IN_1 IN_2 IN_3 INPUTS

PRIOR ART
FIGURE 9

PATENT SKETCH FORM

Attorney RDB

INPUT DATA

EXTRACT FEATURES

SELECT FEATURES

CALCULATE TARGET STATISTICS AND DATA

CLASSIFICATION

DECISION CRITERIA

OUTPUT TARGET INFORMATION
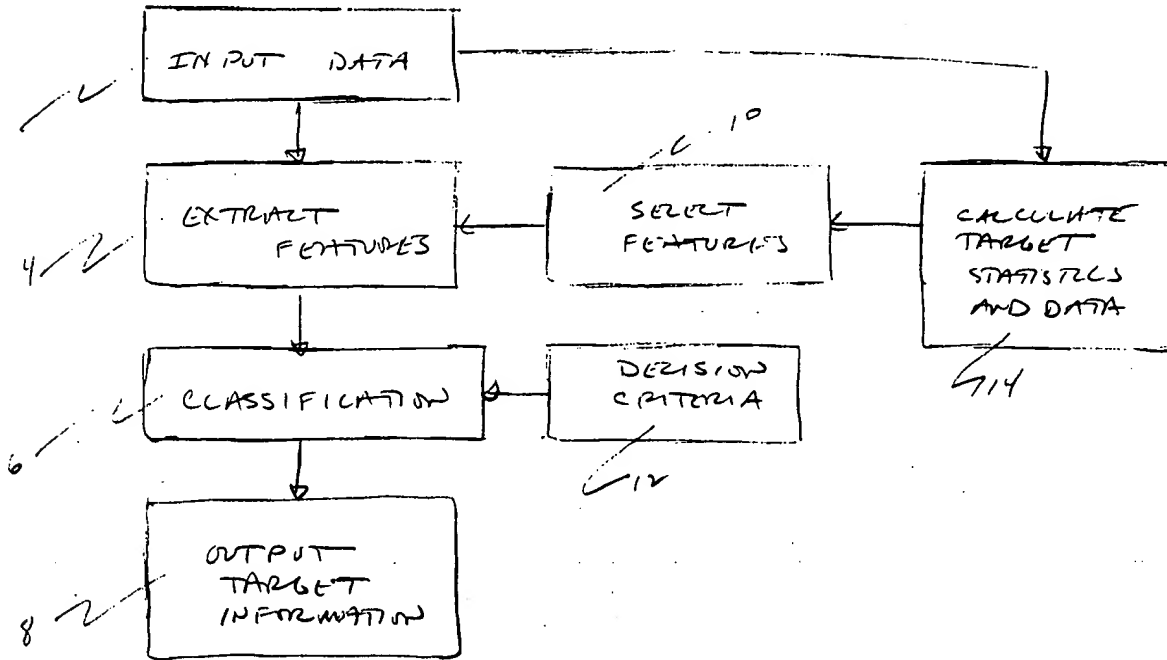
FIGURE 10

PATENT SKETCH FORM

Attorney _____
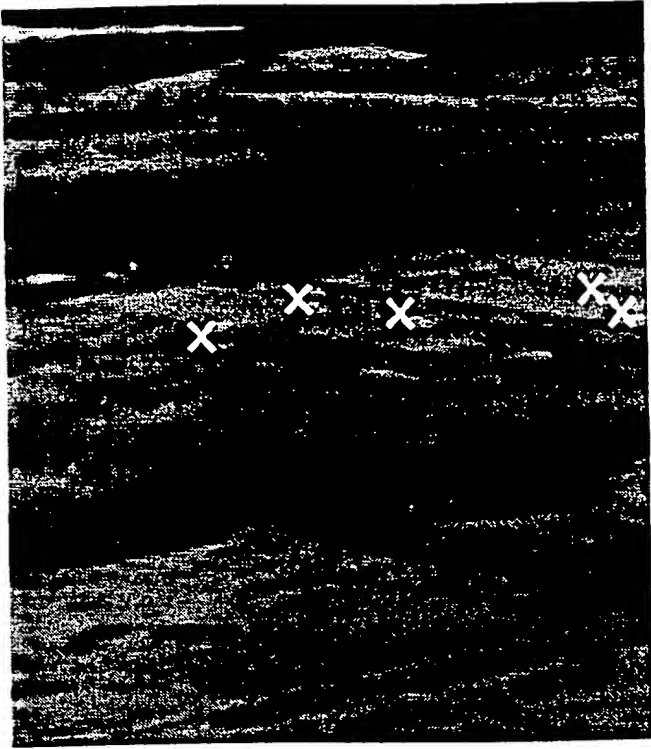

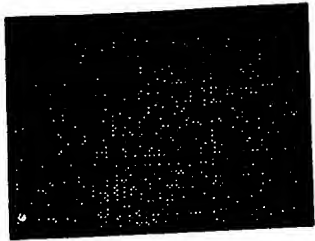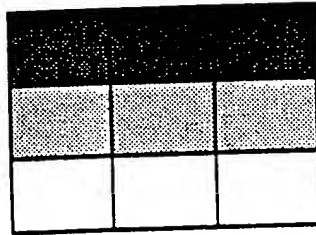
Fig. 11

PATENT SKETCH FORM

Attorney _____

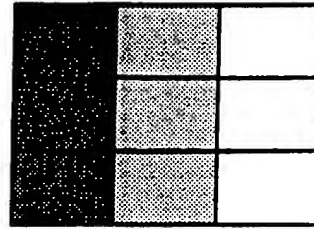Filter 1

Filter 2

Filter 3

Fig 12a

Fig 20

PATENT SKETCH FORM

Attorney _____

Filter 1 s/n = 1

FIG 13a

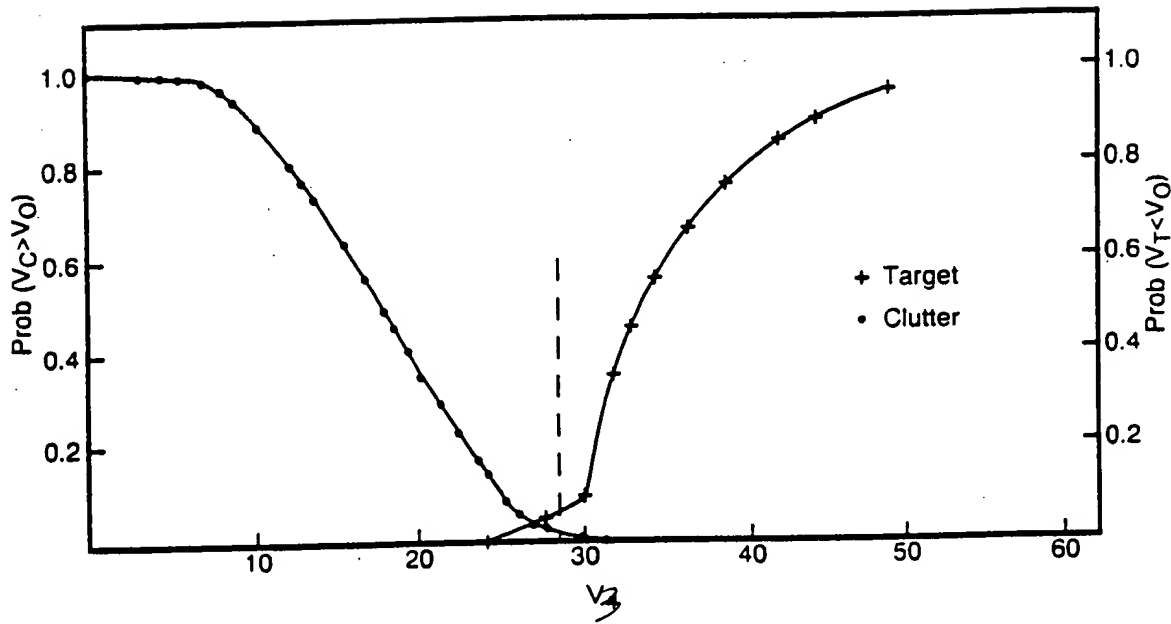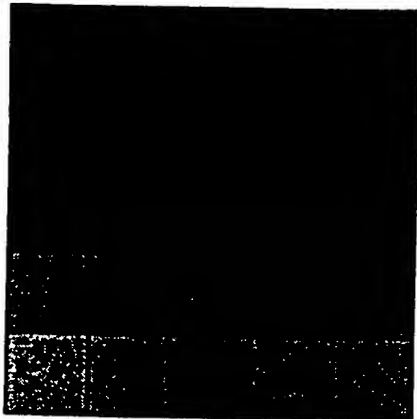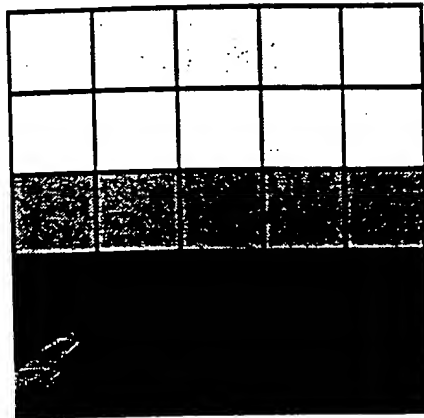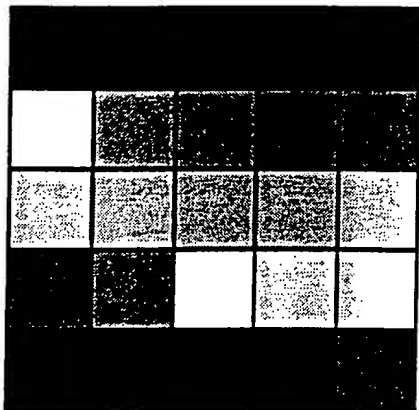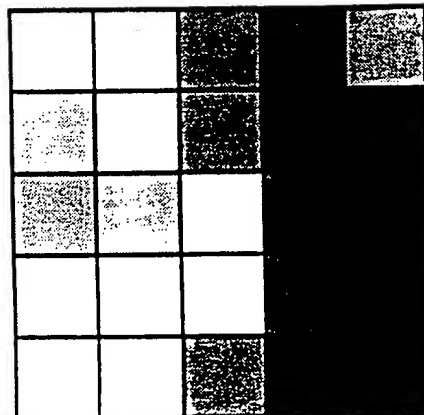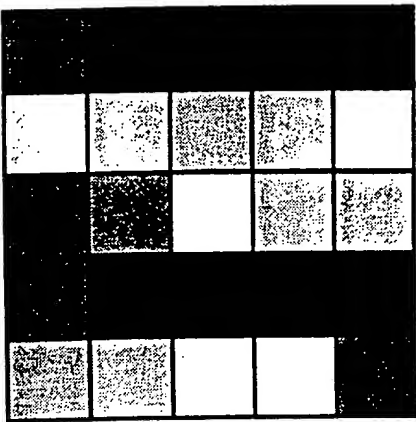Filter 2 s/n = 7

FIG 3b

Filter 3 s/n = 7

FIG 13c

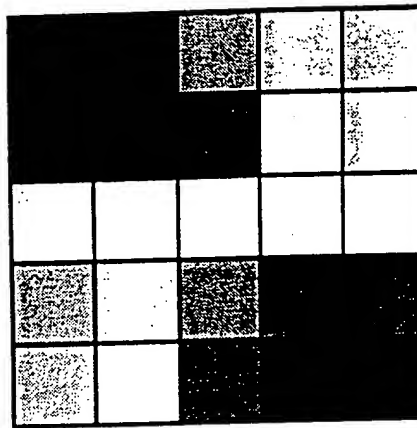Filter 4 s/n = 5

FIG 3D

PATENT SKETCH FORM

Attorney _____
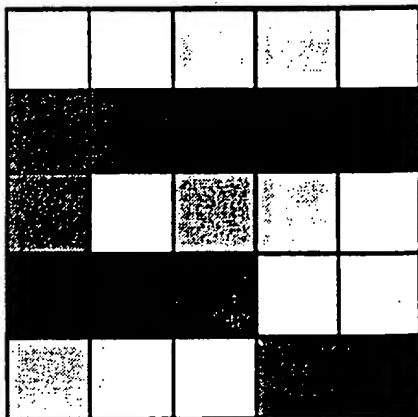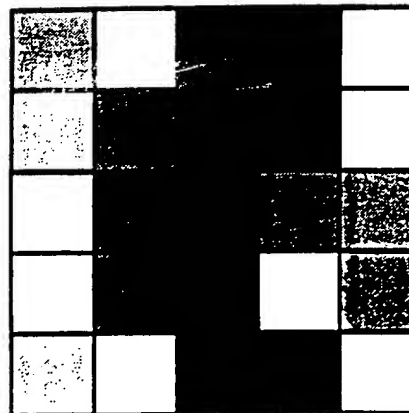
Filter 5 s/n = 23

FIG 13E

Filter 6 s/n = 8

FIG 13F

Filter 7 s/n = 13

Fig 13G

Filter 8 s/n = 9
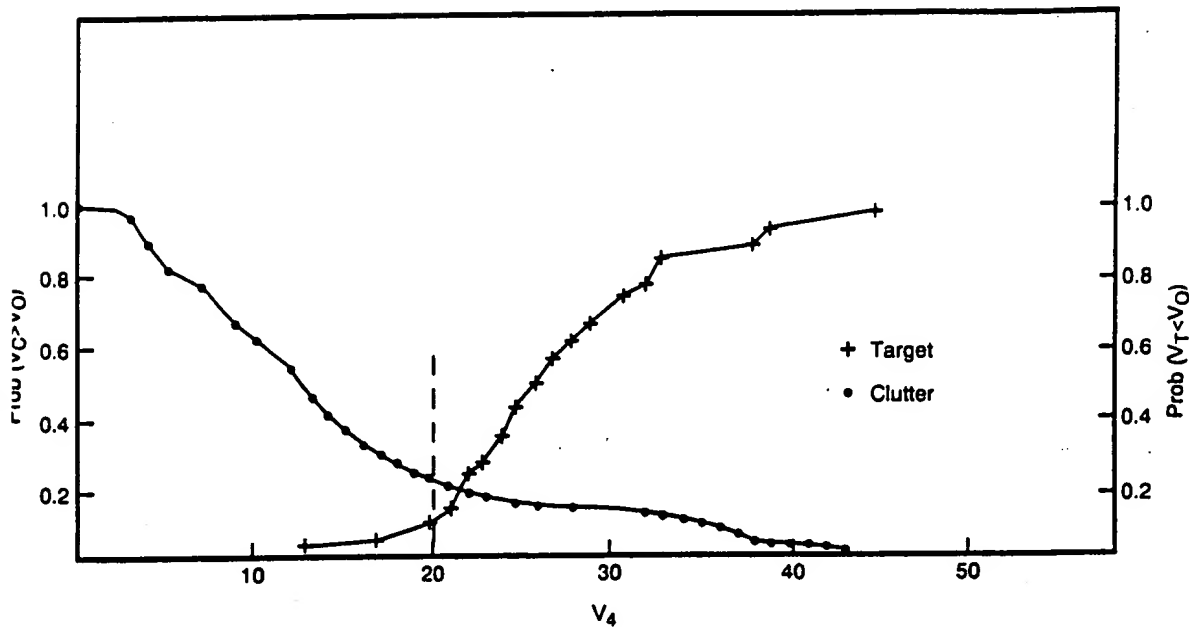
FIG 13H

PATENT SKETCH FORM

Attorney 121714

Fig 14

PATENT SKETCH FORM
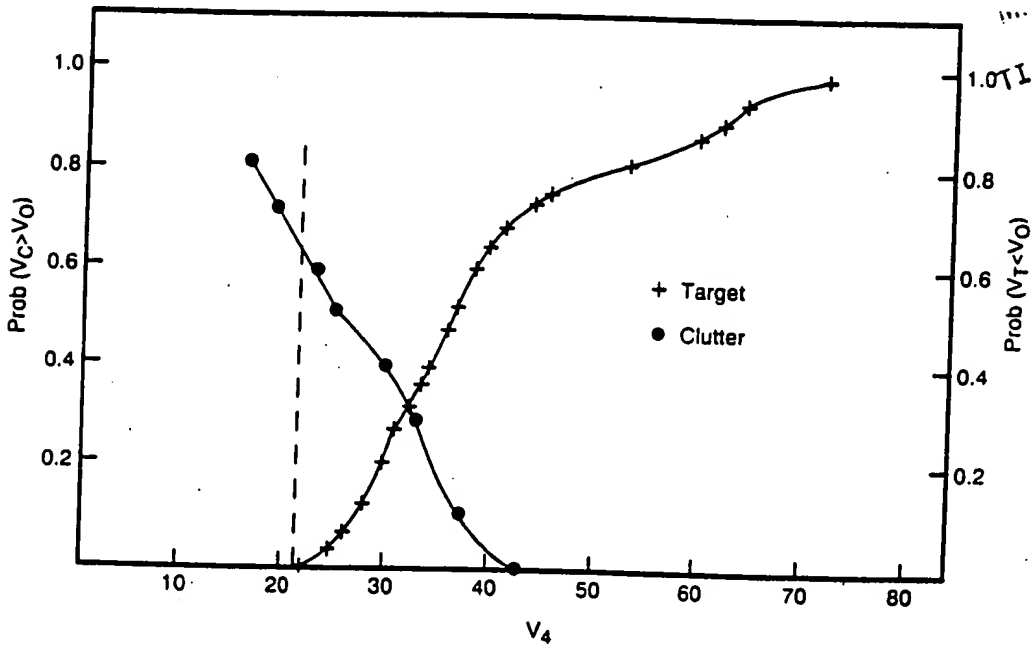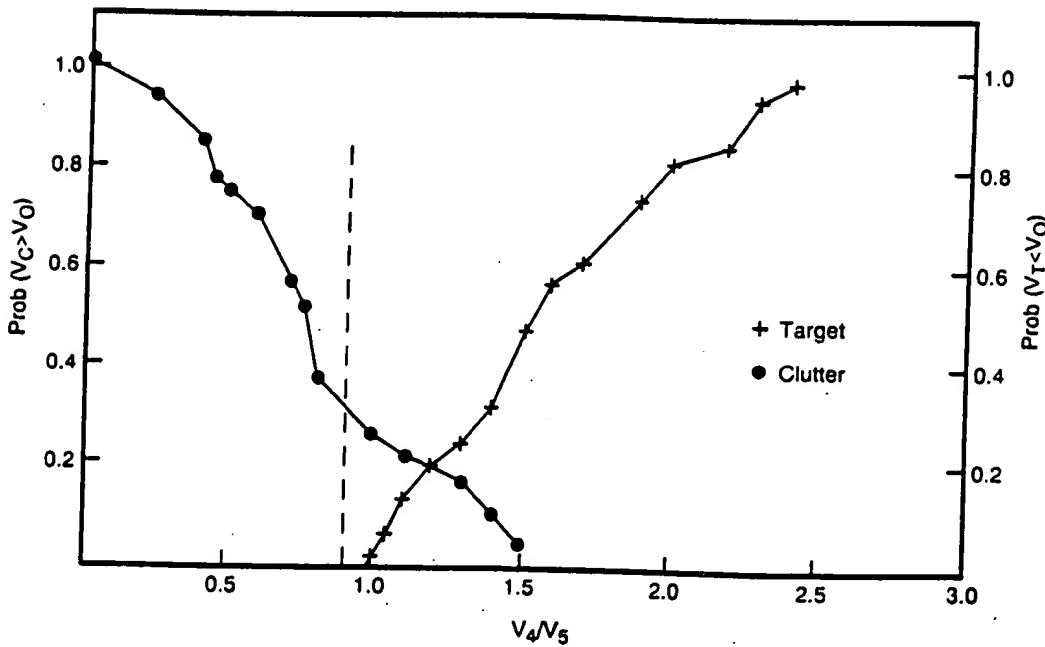
Attorney _____

FIG 15b

Fig 15a

13 , 14

```c
#define N   128      /* number of neurons in simulated network  */
#define C   100      /* number of simulated time steps          */
#define POSITIVE_RAIL  15.0    /* Simulated power supply limits */
#define NEGATIVE_RAIL -15.0
#define Rf              0.001  /* Feedback resistance common to */
                              /* all neurons                    */

main()
{
 double R[N][];
 double Vinitial[N];
 double Vnow[N];
 double sum;
 int c,i,j;

/* Get synapse list and copy initial neuron states into
    relaxation vector */

load_synapse_matrix(R,N);
copy_first_vector_into_second(Vinitial,Vnow,N);

 for(c=0;c<C;c++)               /* for C time steps       */
   {
     for(i=0;i<N;i)            /* for all neurons         */
       {
        sum = 0.0;
        for(j=0;j<N;j++)        /* get sum of products    */
         sum += (Rf/R[i][j])*Vnow[j];

        if(sum > POSITIVE_RAIL)    /* simulate ramp-threshold */
          Vnow[i] = POSITIVE_RAIL;
        else
        if(sum < NEGATIVE_RAIL)
          Vnow[i] = NEGATIVE_RAIL;
        else
          Vnow[i] = sum;
       }
   }

print(Vnow);    /* output final state of neurons */

} /* end of simulation program */
```

TABLE   1

PATENT SKETCH FORM

Attorney_____

Image Set	Number of Images	Location	Scene Description
1	4	G	a
2	2	G	b
3	1	S	c
4	1	S	d
5	2	N	e

a. Fields and Trees; Urban Clutter; Open and Partially Occluded Targets
b. Fields; Urban Clutter; Targets in Open
c. Fields; Urban Clutter; Targets in Open
d. Heavy Forests; Partially Occluded Targets
e. Fields and Heavy Forests; Partially Occluded Targets

Image Set	Number of Images	Location	Scene Description
1	21	S	Fields With Clusters of Trees; Urban Clutter; Open and Partially Occluded Targets.
2	3	N	Heavy Vegetation; Rural Clutter; Open targets.

Data Set II

TABLE II